



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/644,968	08/21/2003	Gregor Buedding	740116-487	7577
22204	7590	11/01/2005		
NIXON PEABODY, LLP 401 9TH STREET, NW SUITE 900 WASHINGTON, DC 20004-2128			EXAMINER BOSWELL, CHRISTOPHER J	
			ART UNIT	PAPER NUMBER
			3676	

DATE MAILED: 11/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/644,968	Applicant(s) BUEDDING ET AL.	
	Examiner Christopher Boswell	Art Unit 3676	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 August 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) 7-17 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 18-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

Claims 7-17 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim.

Election was made **without** traverse in the reply filed on August 10, 2005.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is unclear in Claim 1 whether the engagement element couples and decouples the ratchet to the latch during movement of the engagement element and vice-versa, or if the engagement element makes contact with the ratchet during movement in a first direction and makes contact with the latch in an opposite, second direction. To further prosecution, examination of the claims will continue as best understood by the examiner, where the limitation is believed to be where the engagement element assists in the opening and closing functions for the latch mechanism, and thus the engagement element couples and decouples the ratchet and latch.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-6 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent Number 5,765,884 to Armbruster.

Armbruster discloses a motor vehicle lock having a latch (3) which includes a pre-catch (the surface before element 4) and a main catch (4) and is pivotable around a first axis (2A) into an open position, into a pre-catch position and into a main catch position, a ratchet (5) which is pivotable around a second axis (6A) into an open position, into a pre-catch position and into a main catch position, and an actuator element (53) which includes an actuating element having an engagement element (27) located thereon, wherein the engagement element provides a coupling (via element 8) to and decoupling from the ratchet during movement of the engagement element in respective directions, and provides a coupling to and decoupling from the latch during movement of the engagement element in respective directions of movement of the engagement element opposite the respective directions (column 4, line 41-column 5, line 26), wherein the latch is engaged with the pre-catch or the main catch when the ratchet is located in the pre-catch position or in the main catch position, wherein the latch is kept in the pre-catch position or the main catch position until movement of the actuating element out of an initial position in a first direction such that the ratchet is raised by the actuating element resulting in an opening assistance function (column 4, lines 41-56), wherein the latch is movable from the pre-catch

Art Unit: 3676

position into the main catch position by actuating the actuator element out of the initial position in a second direction opposite the first direction which couples the actuating element to the latch resulting in a closing assistance function (column 4, lines 41-56), and wherein coupling for the closing assistance function is effected by a step-down gear (54) interposed between the actuating element and the latch, as in claim 1.

Armbruster also discloses the actuating element being rotatable about a third axis (figure 1) which is spaced apart from and aligned essentially parallel to said first axis, as in claim 2, wherein the actuating element is a worm wheel (1) is rotatable around the third axis and the engagement element is a coupling journal located on an end face of the worm wheel and extends parallel to the third axis (figure 1), as in claim 3, as well as the step-down gear between the actuating element and the latch is an essentially disk-shaped transmission element (54) which is pivotable around a fourth axis (56) and includes a first actuating surface and a second actuating surface (column 5, lines 28-45), wherein the transmission element, via the first actuating surface, engages the engagement element of the actuating element during movement of the actuating element in the second direction which causes, via the second actuating surface, forced engagement of the latch for coupling of the actuating element to the latch (figure 1), as in claims 4 and 5, and where the step-down gear includes several stages (column 5, lines 31-37), as in claim 6.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 3676

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 18-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Armbruster, in view of U.S. Patent Number 6,022,056 to Cope et al.

Armbruster discloses the invention substantially as claimed in claim 7. Armbruster discloses a motor vehicle lock having a latch (3) which includes a pre-catch (the surface before element 4) and a main catch (4) and is pivotable around a first axis (2A) into an open position, into a pre-catch position and into a main catch position, a ratchet (5) which is pivotable around a second axis (6A) into an open position, into a pre-catch position and into a main catch position, an actuating element (1 and 53), a Hall sensor (37) and a control (35) for determining the position of the door latch from the sensor signals generated by the Hall sensors. However, Armbruster does not disclose a plurality of Hall sensors. Cope teaches of a door latch apparatus with a pair of Hall effect sensors (130 and 132) in the analogous art of door latch mechanisms with Hall effect sensors being utilized to monitor the positions of the components of the door latch mechanism for the purpose of generating a signal produced by the Hall effect devices to indicate a position of a dead latch plunger (column 10, lines 34-43) and to monitor the position of a door latch actuator and also to initiate a rotary cycle of a crank arm, which drives a dead bolt latch, when a trigger signal from a trigger element is generated to unsecure a door (column 10, lines 53-58). It would have been obvious to one with ordinary skill in the art at the time the invention was made to incorporate more Hall sensors to monitor the positions of both the ratchet and the actuating element in order to indicate the position of the ratchet and to monitor the position of the ratchet and also to initiate the operating movement of the actuating element,

Art Unit: 3676

which drives the ratchet, when a trigger signal from a trigger element is generated to release the vehicle door. Wherein, the location of the parts of an invention only involves only routine skill in the art.

Response to Arguments

Applicant's arguments filed March 28, 2005 have been fully considered but they are not persuasive. Regarding the argument that the ratchet of Armbruster is always coupled to the engagement element of the actuator may be correct; however, the current claims are deemed as being unclear as to the function of the engagement element. The examiner is unsure as if the current limitation recites the engagement element coupling and decoupling the ratchet to the latch during movement of the engagement element and vice-versa, or if the engagement element makes contact with the ratchet during movement in a first direction and makes contact with the latch in an opposite, second direction.

Regarding the argument that the step-down transmission of Armbruster functions differently than the current step-down gear, the examiner respectfully disagrees. The step-down gears of both the current invention and applied reference are used to control the amount of torque from the actuator to the respective engagement element, and thus achieve the same results.

Regarding the argument the combination of Armbruster and Cope et al. do not provide a magnet that is moveable into a position that is in the detection ranges of two hall sensors, the examiner respectfully disagrees. As mentioned above, the location of parts of an invention, i.e. the magnets and hall sensors, only involves routine skill in the art. Wherein the problem to be solved in the current application is determining three separate positions of the ratchet, it would

Art Unit: 3676

have been obvious to one with ordinary skill in the art of door latch mechanisms with Hall effect sensors to place the magnets and the corresponding Hall sensors in locations where it could detect and distinguish between the open position, the semi-closed position, and the fully closed position of the latch mechanism.

In response to the Applicant's argument that Cope et al. is nonanalogous art, it has been held that the determination that a reference is from a nonanalogous art is twofold. First, we decide if the reference is within the field of the inventor's endeavor. If it is not, we proceed to determine whether the reference is reasonably pertinent to the particular problem with which the inventor was involved. In re Wood, 202 USPQ 171, 174. In this case, Cope et al. is pertinent to the use and functionality of Hall effect sensors, and their use within latching mechanisms.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Art Unit: 3676

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher Boswell whose telephone number is (571) 272-7054. The examiner can normally be reached on 9:00 - 4:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Glessner can be reached on (571) 272-6843. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CJB *CB*
October 27, 2005


BRIAN E. GLESSNER
SUPERVISORY PATENT EXAMINER